

Referring now to FIGS. 14 and 15, a subscriber can also send message having a voice mail format to non-subscribers by email, if the subscriber has an email account. In FIG. 14 at step 1410, a subscriber 1502 sends an email 1504 with an attachment file 1506 and delivery information 1508 to a local server 1510 using the u-mail addressing convention discussed previously, e.g., "vmail@sf\_cp.com", where the "vmail" portion 1512 indicates that the email should be transmitted to an intended recipient 1552 as a message having a voice mail format and where the "sf\_cp" portion 1516 routes the email 1504 to a server in San Francisco.

The email 1504 may be sent through any suitable network that supports email messaging. To avoid over-complicating FIG. 15, email 1504 is shown being transmitted via a LAN 1518 through a LAN interface 1520.

It is presently contemplated that an incoming message 1522 having a voice message format 1524 and delivery information 1526 are sent as part of email 1504 to local server 1510. More particularly, the incoming message 1522 is sent as within email attachment 1506 and includes a digitized audio message 1528 such as a WAV file. For example, digitized audio message 1528 may be recorded from the subscriber's messaging interface 1530 having a sound card or any device capable of recording a voice message as a digitized audio message. The use of attachment file 1506 to hold incoming message 1522 is not intended to be the only approach but is simply one approach for sending incoming message 1522.

Besides the u-mail addressing convention for indicating a delivery format of voice mail, delivery information 1508 also includes destination address such as a destination phone number 1534 and the subscriber's password 1536. Delivery information 1508 may be placed at the first line of email message 1504 although such an approach is not intended to limit the present invention in anyway.

At step 1412 where upon receipt of incoming message 1522 and delivery information 1508, local server 1510 processes incoming message 1522 by validating the subscriber's identity. Validation includes checking the included password 1536 against the subscriber's email address.

At step 1414, a routing program 1540 or equivalent device determines whether the destination address, e.g., a destination phone number 1534, is within a local area 1542 supported by local server 1510, or within a non-local area 1544 supported by a remote server 1536 by using a routing table 1546.

If the local server 1510 determines that the destination phone number 1534 is within local area 1542, step 1416 is performed. At step 1416, local server 1510 extracts digitized audio message 1528 from attachment file 1506, converts the digitized audio message 1528 into a message 1548 having a voice mail format 1550, and delivers the message 1548 by calling the intended recipient using destination phone number 1534 which was sent as part of delivery information 1508. If the call is answered, the server announces to the answering party that there is a message for the person with the recorded name, and prompts the answering party to listen to the message.

The message may be sent through any suitable network supporting telephone transmission such as a telephone network 1554 via telephone interface 1556.

Otherwise, if the destination phone number 1534 is better served by remote server 1536, i.e., within non-local area 1544, step 1418 is performed. At step 1418, local server 1510 transmits email 1504 having attachment file 1506 to remote server 1536.

At step 1420 where upon receiving email 1504 having attachment file 1506, remote server 1536 extracts digitized

audio message 1528 from attachment file 1506, converts it into a message 1552 having a voice mail format 1554, and delivers it by calling the recipient 1556 using destination phone number 1534 which was sent as part of delivery information 1508. If the call is answered, the server announces to the answering party that there is a message for the person with the recorded name, and prompts the answering party to listen to the message.

In an alternative embodiment of the present invention, each server within a group of servers may be configured to have the answering party enter a pass-code for identity. The pass-code is previously communicated by the subscriber to the recipient for security purposes.

#### Voice Message Presented Via Web Page

FIG. 16 is a schematic block diagram showing the operation of a voice message presented via web page messaging mode in a presently preferred embodiment of the present invention.

FIG. 17 is a schematic block diagram illustrating the use of messaging servers during the operation of a voice presented as web page messaging mode in a presently preferred embodiment of the present invention.

Referring now to FIGS. 16 and 17, a subscriber can also send a voice mail message to a non-subscriber using a web page or similar message format where the message is stored by a server and made accessible to a messaging interface such as a browser. At step 1610, a subscriber 1702 initiates a request by calling a local server 1704, logging in as a subscriber, providing delivery information 1706, and recording an incoming message 1708 having a voice message format 1710. The delivery information 1706 includes a destination address such as an email address 1712 of an intended recipient 1714. The destination address is entered through a telephone keypad 1716 or similar device by using the keypad coding scheme described above.

At step 1612, local server 1704 digitizes incoming message 1708 having voice message format 1710, resulting in a digitized audio message 1718.

At step 1614, a presentation program 1720 or equivalent converts digitized audio message 1718 to a delivery format by storing digitized audio message 1718 in a memory location such as a subscriber's mailbox 1722 within a subscriber mailbox database 1724. For example, the presentation program 1720 creates a web page 1726 that includes digitized audio message 1718, and stores the web page 1726 in subscriber's mailbox 1722.

At step 1616, a notification program 1728 creates a pointer 1730 to the memory location and a notification message 1732 having the intended recipient's email address 1712. The notification message 1732 may take the form of an email message. The notification program 1728 obtains email address 1712 from delivery information 1706.

In the presently preferred embodiment of the present invention, the pointer 1730 is a universal resource locator (URL) that points to a message included in a web page 1726. The URL is included within an HTML file which is included with notification message 1732 as an attachment file 1734. This permits an intended recipient to access the message such as digitized audio message 1718, presented in web page 1726 simply by launching the attachment file 1734 with a messaging interface such as a computer having a web browser 1736. Web page 1726 is configured to present the recipient with options for controlling access to digitized audio message 1718 over a suitable network such as the Internet so long as the messaging interface can support the accessing of digitized audio. This provides a subscriber the convenience of sending a voice message to anyone who has an email account and access to the Web through a web browser.